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**McDERMOTT, WILL & EMERY**

September 9, 2002

Marlene H. Dortch, Esq.  
Secretary  
Federal Communications Commission  
445 - 12th Street, S.W.  
Washington, D.C. 20554

Re: Improving Public Safety Communications in the 800 MHz Band, WT Docket No.  
02-55; *Ex Parte*

Dear Ms. Dortch:

Southern Communications Services, Inc. ("Southern"), through undersigned telecommunications counsel, submits the following comments regarding a report that the Commission submitted to the House Energy and Commerce Committee on July 26, 2002, on the licensing of land mobile radio systems in the 800 MHz band. The following comments supplement the formal Comments and Reply Comments Southern previously filed in this proceeding to further explain why the data submitted to Congress does not accurately depict the nature and extent to which the 800 MHz band is used and why the report to Congress should not be relied upon in developing rules and policies in this proceeding.

Because of certain assumptions underlying the FCC's collection of the licensing data and the manner in which that data has been presented, the data tends to underrepresent the actual extent to which the 800 MHz band is used by entities other than Nextel, and more specifically, by entities that operate commercial mobile radio services in competition with Nextel. Unless these assumptions are acknowledged, or the FCC generates more specific information on spectrum usage at 800 MHz, the FCC could overestimate the proportion of the band which is used by Nextel and seriously underestimate the impact the various realignment plans would have on other licensees.

As noted in Exhibit 1 to the FCC's report to Congress, "all licenses in the 800 MHz band are not equivalent."<sup>1</sup> Thus, simply knowing how many transmitters are licensed at

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<sup>1</sup> FCC's July 26, 2002, Report at Exhibit 1, p. 1.

specific geographic locations within tightly defined urban area boundaries does not allow one to understand how intensively the 800 MHz band is actually used within that urban area. Indeed, the report notes that FCC staff had not performed any "engineering or technical analysis of potential interference" in preparing the report.<sup>2</sup> There are two major reasons why the FCC's methodology tends to underreport actual spectrum usage:

1. Exhibit 4 of the Report, which summarizes spectrum usage in the top 100 Urbanized Areas, is a tabulation of channels for which the FCC's database reflects site-specific licenses.<sup>3</sup> Thus, to the extent an Economic Area (EA) licensee<sup>4</sup> is operating in these markets under a geographic area license, Exhibit 4 would not reflect this usage unless the EA licensee (or another licensee) also held a site-specific license with a location within the boundaries of the Urbanized Area. Southern believes that this approach would tend to undercount channel usage by non-Nextel EA licensees (such as Southern) because Nextel held a large number of site-specific licenses on channels for which it later acquired EA licenses. Thus, Nextel's channel usage would be reflected in this report to the extent it also holds a site-specific license, but channel usage by other EA licensees would not be reflected in the Report unless another licensee also holds a site-specific license in the market.

For example, in the Birmingham market, Southern and its parent, Southern Company, hold EA licenses for channel blocks A, D, DD, E, EE, FF, O, P, Q, R, S, and T. However, the channel listings in Exhibits 4 and 5 show no licensed use on 71 of the channel pairs that are included within Southern's authorized channel blocks for this market. Thus, Exhibits 4 and 5 undercount Southern's spectrum usage in Birmingham by 3.55 MHz. By contrast, Nextel and affiliates of Nextel hold EA licenses in Birmingham for channel blocks B, C, F, G, H, I, J, K, L, M, N, U and V. However, Exhibits 4 and 5 show active licensing on all but two of the channels (0.1 MHz) in Nextel's channel blocks. While Exhibits 4 and 5 depict licensing on nearly all of the channels in Nextel's EA channel blocks, these same exhibits seriously underrepresent the use made by Southern on its EA channel blocks. Thus, if site-based licensing records are examined in a vacuum, one could

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<sup>2</sup> Id.

<sup>3</sup> A site-specific license authorizes the licensee to transmit on discrete frequencies from one or more locations as specified on the station license. The FCC's database therefore includes a record of the transmitter locations and frequencies used at each location.

<sup>4</sup> A geographic area license authorizes the licensee to operate on a number of discrete frequencies, or within a specific range of frequencies, at any location within a defined geographic area. FCC licensing records therefore do not indicate the specific locations at which the licensee is operating, nor the specific frequencies that the licensee is using at any particular location. Economic Area (EA) licenses are geographic area licenses that have boundaries corresponding to the 175 Economic Areas as defined by the Bureau of Economic Analysis, U.S. Department of Commerce. Exhibit 7 to the FCC's Report depicts the EA boundaries.

be led to believe that Nextel makes a significantly larger use of the available spectrum than is the case, or that significant amounts of spectrum remain available for licensing by other parties.

2. By identifying only systems that have transmitter locations licensed within the geographic boundaries of an Urbanized Area, Exhibit 4 omits high-site transmitters that are located outside the Urbanized Area but intended to provide coverage within the Urbanized Area. Most non-Nextel radio systems in the 800 MHz band employ relatively high-power, high-site transmitters to provide coverage over a relatively large service area. It is very common to find such high transmitter sites outside of central cities because very tall towers are typically located outside city limits where land is less expensive and zoning is not an issue, and because cities tend to be in lower-lying areas near rivers and streams, meaning that the higher ground is typically some distance from the city itself. Omission of such high-site transmitters from the FCC's report is particularly troubling since the issues in this docket are premised on the compatibility of Nextel's low-site transmitters and high-site transmitters.

While we understand that the FCC limited its study to spectrum usage in the top 100 Urbanized Areas at the recommendation of the Commerce Committee staff, Southern urges the Commission to recognize that the relative proportion of spectrum usage among different types of users differs significantly between the largest urban areas and smaller towns and rural areas. For example, while Nextel has developed its network primarily within city centers and along major transportation corridors adjacent to urban areas, utilities (including Southern) have designed their networks to cover urban as well as rural areas in order to meet the communications needs of utility crews that must maintain and restore electric service to every residence and business within the utility's electric service area. Thus, it should not be assumed that licensing records for the top 100 Urbanized Areas are necessarily representative of spectrum usage across the country among the different classes of users.

Exhibits 4 and 5 of the FCC's report divide the transmitter counts into four categories: Public Safety, Specialized Mobile Radio (SMR), Business/Land Transportation (B/ILT), and Nextel. Southern is unable to determine from this break-out how the FCC accounted for Southern's spectrum usage, since Southern is licensed on both SMR channels and B/ILT channels and uses a technology platform that is identical to Nextel's. Stated another way, there are no channels allocated in the FCC's Rules for "Nextel" use. Nor is it clear how the FCC accounted for channels that are licensed to the various affiliates of Nextel, such as Nextel Partners.

At the Commerce Committee's suggestion, the FCC did not include spectrum usage data for the National Public Safety Plan Advisory Committee (NPSPAC) channels at 821-824/866-869 MHz. However, it would be very helpful in this proceeding to understand how much of the 6 MHz of spectrum available to Public Safety in this band is actually being used,

and to estimate the total costs that would be involved in relocating these licensees either to another portion of the 800 MHz band or to another band such as 700 MHz, as has been proposed by various parties in this proceeding.

Finally, Exhibit 5 of the report, which includes scatter diagrams of channel use, inexplicably omits any reference to systems licensed in the 855.0125-856.0125 MHz band for all of the 100 Urbanized Areas. The forty channel pairs in this band segment are allocated to Public Safety (8 channel pairs), Business (16 channel pairs), and Industrial/Land Transportation (16 channel pairs). Thus, omission of this band segment from the Exhibit likely omits depiction of a large number of "non-Nextel" systems.

Understanding the wide range of spectrum uses in this band is a first step toward understanding the severe impacts that could be caused by the adoption of a rebanding plan that will benefit one company completely and benefit Public Safety only marginally.

Pursuant to the Commission's Rules, one copy of this letter is being submitted electronically through the Commission's Electronic Comment Filing System.

Very truly yours,

/s/ Christine M. Gill

Christine M. Gill  
Counsel for Southern Communications  
Services, Inc.